LINKING PROCEDURAL AND DISTRIBUTIVE JUSTICE IN FAMILY DECISION-MAKING TO ADOLESCENT AND FAMILY FUNCTIONING

By

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Abstract of Dissertation Presented to the Graduate School
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The first phase of this study was to further refine the Family Justice Inventory--Youth Form (FJI-Y) thereby creating comprehensive conceptually integrated measures of procedural and distributive justice for adolescents within the family context. Subsequently, these measures were used to investigate the relationship of adolescents' justice appraisals of family conflict resolution strategies to family (i.e., family cohesion, family conflict) and individual (i.e., psychological well-being, psychological distress, and deviant behavior) functioning. Finally, male and female adolescents' justice appraisals were compared. A sample of 165 adolescents (ages 11-18) who attended regular education schools in northern Florida completed the FJI-Y. Factor analysis revealed that the items comprising nine procedural justice domains (accuracy, consistency, correction, neutrality, personal respect, process control, standing, trust, and voice) could be reduced to five interpretable procedural justice constructs (Process Control, Neutrality, Personal Respect, Status Recognition, Correction). Four interpretable distributive justice factors emerged (Equality, Decision Control, Need, Equity) from the items comprising four distributive justice domains (equality, decision control, need, equity). Using procedural justice factor scores in regression analyses, Neutrality, Personal Respect, and Status Recognition were predictors of family conflict, family cohesion, adolescents’ psychological well-being and adolescents’ psychological distress, whereas none of the procedural justice factors predicted deviant behavior. Using distributive justice factor scores in regression analyses, Equality predicted all of the outcome measures for family and individual functioning. As predicted, when both procedural and distributive justice factor scores were combined in regression analyses, only the procedural justice criteria accounted for unique variance in family and individual functioning. Finally, when comparing male and female participants, females valued more procedural justice criteria than the males. Furthermore, both males and females valued justice criteria that foster relationships. This study supports the need for a comprehensive conceptually integrated approach to procedural and distributive justice.

CHAPTER 1
INTRODUCTION

Adolescent and family functioning may be impacted by the manner in which family disputes are resolved. In the context of family decision-making, children who perceive repeated unfair treatment and unfair outcomes may begin to feel a strong sense of injustice and resentment towards their parents. Feelings of injustice and resentment could, in turn, lead to anger and recurring conflict within the family context (Fondacaro & Heller, 1990; Tedeschi & Felson, 1994).

The manner in which conflicts are resolved and resources are allocated within the family has been shown to be related to principles of distributive and procedural justice (Fondacaro, Jackson, & Luescher, 2002). Distributive justice refers to whether the outcome of the situation was perceived to be fair. Equity, equality, and need consistently have been identified in distributive justice research as criteria for evaluating outcome fairness (Lind & Tyler, 1988). The term procedural justice refers to the extent to which those subjected to conflict resolution and decision-making judge the process to be fair (Tyler & Lind, 1992). Research on procedural justice has suggested several criteria people use to evaluate procedural fairness such as whether they are treated in a consistent and impartial manner and as a valued member of the group during the decision-making process (Fondacaro, 1995; Lind & Tyler, 1988).

Fondacaro and his colleagues (Fondacaro et al., 2002; Jackson & Fondacaro, 1999; Fondacaro, Dunkle & Pathak, 1998) have begun to develop comprehensive and conceptually integrated measures of procedural and distributive justice constructs within the context of family decision-making for older adolescents (ages 18 to 22 years). The findings of these studies have proven promising in linking justice appraisals to family functioning and deviant behavior outside the family context. A crucial next step is to pursue this line of investigation in a sample of younger adolescence (ages 11 to 18). Understanding how conflicts are resolved and resources are allocated during younger adolescence could help parents resolve conflicts in a constructive manner that promotes family cohesion and reduces family conflict.

Accordingly, Diamond (2001) was interested in investigating the relationship between justice appraisals and family decision-making for younger adolescents and, therefore, adapted the Family Justice Inventory (FJI) developed by Fondacaro et al. (2002) for older adolescents to be used with younger adolescents (ages 11 to 18 years). Diamond (2001) found the Family Justice Inventory--Youth Form (FJI-Y) to be a reliable measure of procedural and distributive justice in family decision-making. However, this study indicated a need to further refine the FJI-Y through factor analysis and to begin to examine the validity of this measure. The long-range objective of this line of research is to utilize the FJI-Y to guide basic and applied research on parent-adolescent conflict resolution.

CHAPTER 2
REVIEW OF LITERATURE

Parent-Adolescent Conflict

With the exception of infancy, the period of adolescence is characterized by more rapid changes than any other period of development. During adolescence, physical changes related to puberty (Hill, 1988), development of formal logic (Inhelder & Piaget, 1958), and the burgeoning of new social-cognitive abilities (Shantz, 1983) could concomitantly occur with changing peer groups, role expectations, and familial relationships. Given that all of these changes may happen simultaneously for an adolescent, it is understandable how an adolescent can be fraught with anxiety, uncertainty, and insecurities about themselves and their world. Parents have reported in several studies that the adolescent years are more stressful than any other period of child development (Offer, 1969; Olson, McCubbin, Barnes, Larson, Muxen, & Wilson, 1983).

A significant cause of stress for both parents and their children is the realignment of familial relationships during adolescence (Smetana, Yau, Restrepo, & Braeges, 1991). The family is a social system with a social organization composed of hierarchical structures and patterns of authority. Family conflicts emerge as boundaries of parental authority are renegotiated. During adolescence, parents are torn between maintaining their social system and relinquishing their authority to allow their child jurisdiction over his/her behavior. Therefore, the style of parenting that might have been functional during the child's early years may become increasingly inappropriate for adolescents as they move into adulthood (Smetana, 1988).

Once a child reaches adolescence, families make adjustments for the amount and type of influence this child has in family decision-making. As a result, parent-child relationships during adolescence undergo an increase in the amount of conflict exchanges (Johnson, Shulman, & Collins, 1991). Theories of adolescent development (e.g., Laursen & Collins, 1994; Sandy & Cochran, 2000) often emphasize that parent-child conflicts are more frequent and intense than the conflicts adolescents experience in other relationships (e.g., with siblings, peers, or other adults). Parent and adolescent conflict is typically characterized by minor disagreements about everyday issues such as doing chores, schoolwork, and choice of appearance. Although each family is different, typically major conflicts are not as frequent as minor bickering or squabbling (Smetana et al., 1991).

There is some disagreement about the affects of parent-adolescent conflict on adolescent development. Some studies assert that adolescent and parent conflict may be adaptive. For example, Cooper, Grotevant, and Condon (1983) found that disagreements might facilitate perspective taking and identity formation. Similarly, Smetana et al. (1991) proposed that conflict over everyday issues provides a context for adolescents to develop autonomy. However, Smetana et al. (1991) also found that overall family conflict is related to more negative styles of social interactions between parents and adolescents, which has been found to hinder adolescent development (Hauser et al., 1984; Powers, Hauser, Schwartz, Noam, & Jacobson, 1983). More research is needed to understand how conflict can sometimes serve as an adaptive function to fostering independence and how at other times, conflict can be harmful to adolescent development.

Longitudinal studies of families indicate that the cumulative effects of continuous conflict within a family can be detrimental (Berndt & Keefe, 1992). Recurrent conflict may deteriorate relationship bonds and can have a negative effect on development (Patterson & Bank, 1989; Patterson, Capaldi, & Bank, 1991). Furthermore, studies have indicated that increases in family conflict have been associated with increases in delinquent behaviors (Patterson & Bank, 1989; Patterson, et al., 1991). A family plagued with ongoing conflict is likely to have a low amount of support, which may lead to aggressive behaviors outside the family context (Fondacaro, Dunkel, & Pathak, 1998).

From a socialization perspective, the development of children's emotional and social functioning is likely to be impacted by family dynamics (Wentzel & Feldman, 1996). Discrepancies in adolescent adjustment and behavior are associated with differences in familial interactions (Baumrind, 1968; Cooper et al., 1984; Elder, 1980; Hauser, et al., 1984). The strategies children learn through resolving family conflicts are carried over into other relationships outside the family (Laursen & Collins, 1994).

Different styles of parenting may change how parent-adolescent conflict affects the adolescent within and outside the family context. Baumrind (1971, 1989, 1991a, 1991b) identified four parenting styles: authoritative parents, authoritarian, permissive, and rejecting-neglecting. Authoritative parents are responsive to their child's opinion and yet demanding. Authoritarian parents are not receptive to their child's opinions and are demanding. Permissive parents are responsive to their child's perspective, but provide them with very little rules, structure, or discipline. Rejecting-neglecting parents are neither responsive nor demanding. Several studies have shown that authoritative parenting is associated with many positive adolescent behaviors such as good academic performance (Dornbusch, Ritter, Leiderman, Roberts & Fraleigh, 1987; Steinberg, Lamborn, & Dornbusch, 1992), increased autonomy and self-esteem (Baumrind, 1989, 1991b; Buri, 1989; Smetana, 1995; Steinberg, Elmen, & Mounts, 1989; Steinberg, Mounts, Lamborn, & Dornbusch, 1991), and less deviant behavior (Baumrind 1991b).

Similarly, Smetana (1995) found that an adolescent’s conception of parental authority and parenting styles contributed significantly to emotional autonomy and parent-adolescent conflict. This study found that increased frequency and intensity of parent-adolescent conflict was predicted by more authoritarian parenting and less authoritative parenting. Authoritative parents include their child in family decision-making and support selfexpression, which might help decrease family conflict (Sandy & Cochran, 2000). Research confirms that quite frequently the root of antisocial behavior and aggression is strict and coercive parenting (DeBaryshe, Patterson, & Capaldi, 1993; Dishion, Patterson, Stoolmiller, & Skinner, 1991; Patterson, DeBaryshe, & Ramesey, 1989).

Parenting styles affect which friends adolescents select, and the quality of the parent-child relationship will affect how much an adolescent is susceptible to peer influences. During adolescence, peer relationships become an increasingly important influence on children's lives. Research indicates that adolescents tend to select like-minded friends who reciprocally affect each other in decisions concerning achievement, aggression, and deviant behavior (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000). Authoritative parents tend to have children who are not as easily persuaded to engage in deviant behavior (e.g., pressure to use illicit drugs and alcohol; Mounts & Steinberg, 1995) as opposed to children of permissive (Devereux, 1970) or authoritarian (Fuligni & Eccles, 1993) parents. Moreover, children of authoritative parents are more likely to be influenced by positive peer pressure, such as doing well in school. Adolescents often respond to the authoritarian approach to parenting by turning to their peers for behavioral guidance, whereas adolescents of authoritative parents are less likely to get into or cause trouble (Steinberg & Darling, 1994).

Adolescents' functioning both within and outside the family context may be impacted by the manner in which families resolve conflicts. Children who perceive repeated unfair treatment and unfair outcomes of family conflicts may begin to feel a strong sense of injustice and resentment toward their parents. These feelings of injustice and resentment could, in turn, spawn anger and lead to continuous family conflict (Fondacaro & Heller, 1990; Tedeschi & Felson, 1994). The manner in which family disputes are resolved may be related to principles of distributive and procedural justice that constitute conflict resolution and decision-making in our legal system (Fondacaro & Jackson, 1999).

Distributive and Procedural Justice Research

Issues of justice pervade social life. At both the societal level and in more personal relationships such as within the family, individuals assess whether or not they were treated fairly by both the decision-making process and the outcome. Individuals judge fairness of a decision based on principles of distributive and procedural justice (Deutsch, 2000).

Distributive justice research has identified equity, equality, and need as criteria people use for evaluating outcome fairness of a decision (Deutsch, 2000; Lind & Tyler, 1988). Equity refers to whether the decision-making outcome is based on the individual's prior contribution, whereas equality refers to whether the outcome is based on dividing resources equally, regardless of input. Finally, need refers to whether the decision-making outcome is based on helping those with the greatest need (Deutsch, 2000; Deutsch, 1975; Tyler & Smith, 1995).

Research suggests that people choose different distributive justice criteria to evaluate outcome fairness based on their individual interaction goals (Deutsch, 1975). For example, equity becomes an important justice criterion when the goal is economic productivity such as in the workplace. Equality and need are more important distributive justice criteria when interpersonal relations matter to the individual (Deutsch, 1975; Tyler & Smith, 1995). Deutsch (1975) suggested that the dominant distributive justice criteria used to evaluate outcome fairness would depend on the type of relationship the individual chooses to foster. A person will evaluate outcome fairness based on equality if the individual's goal is to promote pleasant social relationships. However, if the goal of the individual is to foster personal development or personal welfare of another, then need will be the dominant criterion used to evaluate outcome fairness.

Distributive justice research with adults has found gender differences in appraisals of distributive justice. Studies have found that men are more likely to distribute resources according to equity principles, whereas women are more likely to distribute resources equally (Furby, 1986). The most common explanation for this gender difference is that men and women have different goals for social interaction (Deaux, 1976; Sampson, 1975). Women care more about harmonious relationships and focus on the person. Men, however, care more about efficiently performing the task and focus on impersonal positions (Kidder, Fagan, & Cohn, 1981).

The ultimate outcome of a situation may not be the only factor of importance to a person who is evaluating whether they were treated in a just or fair manner. In fact, research has suggested that people care as much or more about how they are treated during the decision-making process as they do about the ultimate outcome of the dispute. People are more willing to accept the outcome of a conflict if they believe they were treated fairly, even if the outcome does not favor them. Furthermore, people are more likely to evaluate the decision-making process as fair if they have some control during the course of making the final decision (Fondacaro et al., 1998; Tyler & Lind, 1992; Tyler, 1989; Thibaut & Walker, 1975).

The term procedural justice refers to the extent to which individuals subjected to conflict resolution and decision-making judge the process to be fair (Tyler & Lind, 1992). The area of procedural justice research has made major conceptual advances over the past two decades in identifying criteria for evaluating procedural fairness (Tyler, Boeckmann, Smith, & Huo, 1997). Early research in the area of procedural justice focused on the importance of process control and decision control. Process control refers to a person's control over the presentation of information and decision control refers to control over the actual decision made. Thibaut and Walker (1975) were the first to draw attention to the issue of procedural justice through empirical research. They proposed an instrumental model of procedural justice, which emphasized judgments of control over both process and outcomes. Guided by their instrumental model of procedural justice, they suggested that people value process control or voice (i.e., a person's control over how information or evidence is presented during the decision-making process). According to Thibaut and Walker (1975), people value process control because it provides the instrumental benefit of having some indirect influence over the outcome of the situation.

Following Thibaut and Walker's (1975) research, Leventhal (1980) moved beyond control dimensions and proposed more comprehensive criteria for evaluating procedural fairness, which included voice, accuracy, consistency, correctability, ethicality, and impartiality. Voice is similar to process control and refers to an individual's opportunity to present his/her views. Accuracy refers to how carefully the decision-making is based on as much good information and informed opinion as possible. Consistency refers to uniformity of decision-making procedures across persons and over time. Correctability refers to whether opportunities exist to modify and reverse decisions made at various points in the decision-making process. Ethicality refers to whether the person affected by the final decision was treated with personal respect and dignity. Finally, impartiality refers to whether the decision-making authority has demonstrated even-handed treatment, honesty, and lack of bias to ensure that those involved are treated equally.

More recently, Tyler (1994) expanded on Thibaut and Walker's instrumental model of procedural justice by accounting for procedural effects through an identity-based relational model. According to Tyler (1994), people are concerned with procedural justice for reasons other than the possibility of having some instrumental influence on the outcome. He believes that people view fair treatment and the opportunity to provide input in the decision-making process as having value itself. Tyler (1994) suggests that people care about relational issues such as whether they are treated with dignity and respect, and they want to be heard regardless of the ultimate outcome.

Tyler (1989) conceptualized procedural justice in terms of the relationships between decision-makers and participants in the decision-making process. People evaluate the procedural fairness of interactions with others along relational dimensions. Tyler (1989) combined the works of Thibaut and Walker (1975) and Leventhal (1980) to develop a comprehensive theoretical framework of procedural justice. Tyler (1989) recognized the importance of the control dimension as conceptualized by Thibaut and Walker's (1975) and Leventhal's research. Additionally, Tyler (1989) identified neutrality (consisting of Leventhal's dimensions of consistency, impartiality, accuracy, correctability), standing (similar to Leventhal's dignity dimension), and trust as the primary procedural justice criterion underlying his relational model. Trust is the only dimension unique to Tyler's (1989) relational model of procedural justice. People evaluate neutrality by focusing on whether a "level playing field" has been created by an authority figure through fair treatment, honesty, and lack of bias (Tyler, 1994; p. 854). Standing or status recognition refers to whether a person perceives an authority figure as treating him/her with dignity and respect and as a valued person in the group (Tyler & Bies, 1990; p. 853). Trust refers to a person's beliefs about the good intentions or motives of the decision-making authority (p. 854). Tyler suggests in his relational model that people are more likely to believe they were treated fairly if they feel the authority figure dealt with the decision-making process in a neutral, trustworthy, and respectful manner (Fondacaro et al., 1998).

Justice Appraisals within the Family Context

One of the limitations of research in the areas of procedural and distributive is that these constructs typically have not been assessed with comprehensive and conceptually integrated measures (Fondacaro, et al., 2002). Furthermore, there is considerable variation across studies in how justice criteria are operationalized and measured. Most previous studies have allocated only a few items to measure procedural and distributive justice dimensions for a particular study (Greenberg, 1996). In order to guide future conceptual advances in the areas of procedural and distributive justice research, reliable and valid measures of procedural and distributive justice constructs need to be developed and adapted to relevant contexts (Fondacaro, et al., 2002). These measures, in turn, will facilitate empirical evaluations of the conceptual frameworks proposed by theorists such as Leventhal (1980) and Tyler (1994), as well as Fondacaro and his colleagues (e.g., Fondacaro et al., 2002; Jackson & Fondacaro, 1999).

Preliminary studies have indicated that procedural and distributive justice effects may be highly context specific (Fondacaro et al., 1998; Jackson & Fondacaro, 1999; Tyler & Degoey, 1995). For example, the importance of certain procedural and distributive justice dimensions may depend on whether the decision-making is being evaluated within the context of the legal system, family, or community (Tyler, Boeckmann, Smith & Huo, 1997; Tyler & Degoey, 1995). Therefore, there is a need for empirical research in this area to develop reliable and valid measures to assess the procedural and distributive justice constructs within specific contexts such as the family. The systematic development of reliable and valid measures adapted to the family decision-making context will help identify which aspects of the procedural and distributive constructs (e.g., respect, voice, equality) are most closely related to appraisals of fairness, family functioning, and psychosocial adjustment.

Fondacaro and his colleagues have begun to develop comprehensive measures of procedural and distributive justice constructs within the family decision-making context. One of the earliest studies by Fondacaro, Dunkle, and Pathak (1998) established a link between procedural justice appraisals in family decision-making and family functioning as well as psychosocial outcomes. Later, Jackson and Fondacaro (1999) found that voice did not predict deviant behavior among the same sample of older adolescents. Finally, Fondacaro, Jackson, and Luescher (2002) expanded on prior research of justice appraisals in the context of family decision-making by including distributive justice criteria and developed, using factor analysis, comprehensive conceptually integrated measures of procedural and distributive justice.

The Fondacaro et al. (1998) study of 240 participants in late adolescence (ages 18 to 22 years) supports Tyler's

(1994) relational model of procedural justice. They examined the manner in which specific family disputes are resolved that may contribute to late adolescents' psychosocial dysfunction and problem behaviors. Judgments by older adolescents of both procedural fairness and specific relational criteria in evaluating procedural justice (neutrality, trust, and standing) were positively associated with family cohesion and psychological well-being. Family-level cohesion as perceived by adolescents reflects the amount of emotional closeness or distance children feel towards their parent(s) (Wentzel & Feldman, 1996). Additionally, Fondacaro et al. (1998) found that trust and outcome satisfaction were the best combined predictors of family cohesion. Results also indicated that ongoing levels of family conflict were associated with disputes that were handled in a less neutral, trustworthy, and respectful manner as well as less control and outcome satisfaction. However, unlike family cohesion, the best combined predictors of family conflict were low standing (status recognition) and low outcome satisfaction. Being treated disrespectfully may lead to on-going family conflict and lack of trust may make it difficult for families to maintain or establish family cohesion.

Fondacaro et al. (1998) found that deviant behavior and psychological distress in older adolescents were associated with less neutral, trustworthy, and respectful treatment by parents when resolving family disputes. The best predictor of deviant behavior and psychological distress was standing, which suggests that older adolescents who are treated disrespectfully are more likely to engage in acting out behavior. Similarly, psychological well-being of older adolescents was associated with being treated in a neutral, trustworthy, and respectful manner by parents. The best predictor for psychological well-being was standing or being treated with dignity and respect. A major contribution of this study was the establishment of a link between justice appraisals and psychosocial outcomes such as aggressive behavior.

Jackson and Fondacaro (1999) utilized the same questionnaire battery and sample as Fondacaro et al. (1998) and found that personal respect and status recognition factors (but not voice) accounted for unique variance in predicting deviant behavior outside of the family context. These results indicated that older adolescents' evaluations of procedural justice in resolving specific family disputes predict psychosocial outcomes such as deviant behavior. Voice did not predict deviant behavior among participants in late adolescence, which may be a result of the context for evaluating this procedural justice criterion. This study indicated that developmental factors (older versus younger adolescents) could play a role in determining the importance of voice effects.

Fondacaro et al. (2002) expanded on the Fondacaro et al. (1998) and Jackson and Fondacaro (1999) studies by including the distributive justice dimensions as well as additional analyses of the relationship between justice appraisals and family functioning. This study examined the procedural and distributive justice dimensions of the Family Justice Inventory (FJI) to develop comprehensive conceptually integrated measures of procedural and distributive justice. The original FJI included 13 subscales of procedural and distributive justice. The FJI consisted of nine procedural justice and four distributive justice criteria. Factor analyses revealed that there were four distributive justice factors comprised of decision control, equity, equality, and need. However, the nine procedural justice subscales could be reduced to five procedural justice indices consisting of personal respect, status recognition, process control, correction, and trust. Therefore, there were not as many procedural justice criteria as originally conceptualized.

Fondacaro et al. (2002) used procedural and distributive justice factor scores to examine the relationship of older adolescents' justice appraisals to family conflict and cohesion. Results of procedural justice factor scores in regression analyses indicated that personal respect, status recognition, correction, and trust accounted for the unique variance in family conflict and cohesion. Multiple regression analyses using only the distributive justice factor scores revealed that decision control and need were the best predictors of family cohesion and conflict. When both the procedural and distributive justice scores were entered simultaneously in regression analyses only the procedural justice components of personal respect, status recognition, and trust accounted for the unique variance in family conflict and family cohesion. However, equity did account for unique variance in family conflict, but not in family cohesion. The relationship between equity and conflict was positive, which suggests that families who resolve conflicts based on principles of equity are more likely to have higher levels of family conflict. More importantly, older adolescents would prefer their authority figures adhere to principles of procedural justice than distributive justice when resolving family disputes.

The findings of these studies by Fondacaro and his colleagues have proven promising in linking justice appraisals by older adolescents with family functioning and deviant behavior outside the family context (e.g., Fondacaro et al., 2002; Jackson & Fondacaro, 1999; Fondacaro et al., 1998). However, the only research that currently exists on procedural and distributive justice in the context of family decision-making has been with participants in late adolescence (ages 18 to 22 years). Moreover, the results of these studies warrant further investigations of procedural and distributive justice research in the context of family decision-making with a younger sample of adolescents, including those in the early and middle stages of adolescence.

Research on Justice Appraisals by Adolescents

Very little research has been conducted with children and their understanding of procedural and distributive justice concepts. Furthermore, much of the investigative work on children and justice appraisals has focused on the court system (Hicks & Lawrence, 1993). However, research has indicated that children as young as first grade are sensitive to issues of procedural justice. Gold, Darley, Hilton, and Zanna (1984) found that first and fifth grade students were sensitive to procedural justice manipulations when given a hypothetical case of a child who was accused of breaking a vase and being punished by her mother. These young children used their awareness of procedural justice to guide their judgments of fairness and considered the punishment to be unfair when procedural justice safeguards were not met.

Cashmore (1988) interviewed Australian children who were appearing in court for issues related to criminal charges. Her study supported the criteria of process control, voice, and neutrality as being important procedural justice safeguards for children. Children were more satisfied with the court's decision if they had an opportunity to express their opinion.

A study by Hicks and Lawrence (1993) of seventh and ninth grade adolescents found that adolescents consider many of the same criteria as important for obtaining procedural fairness as adults when judging a hypothetical case about a thief. For example, adolescents considered the process to be fair when the judge was impartial and respectful. Procedural justice criteria contributed to the adolescents' satisfaction with the final decision and their determination of the overall fairness of the court case.

Although adolescents seem to have similar views as adults on procedural justice, there are some concepts that are unique to them. Hicks and Lawrence (1993) found that unlike adults, correctability or the right to appeal was not important in securing procedural fairness for adolescents. These results could be context specific in that adolescents may see the courts as extremely powerful and believe that their decisions are irreversible. This study also found gender and age effects in their research with adolescents, which have not been found in procedural justice research with adults. Overall, girls considered procedural justice to be more important than boys. Girls placed more importance on the concepts of voice, accuracy, consistency, and correctability. With the exception of correctability, most of the items girls' valued promoted better interpersonal relationships. These results align with the distributive justice research with adults, which have found women to be more concerned with nurturing interpersonal relationships, whereas men focus on encouraging efficiency (e.g., Furby, 1986; Kidder, Fagan, & Cohn, 1981).

Understanding the need for procedural and distributive justice research on the period of early and middle adolescence within the family context, Diamond (2001) adapted the Family Justice Inventory (FJI) developed by Fondacaro and his colleagues for older adolescents to be used with younger adolescents (ages 11 to 18 years). Items on the FJI were changed to reflect the reading levels and understanding of adolescents for the Family Justice Inventory--Youth Form. Both FJI and its younger extension the FJI-Y include global indices of procedural and distributive fairness, with subscales measuring specific dimensions of the procedural and distributive justice constructs. Diamond (2001) examined the reliability of the FJI-Y as an instrument to investigate procedural and distributive justice in the context of family decision-making among younger adolescents and their parents and found the FJI-Y inventory to be a reliable measure.

Diamond's (2001) study confirmed that procedural and distributive justice constructs are multidimensional. However, the procedural justice domain may not have as many dimensions as originally conceptualized. Only accuracy, neutrality, and trust accounted for the unique variance in global procedural fairness, whereas studies by Fondacaro and his colleagues (Fondacaro et al., 2002) also found process control, voice, and dignity to account for the unique variance in global procedural fairness. Equality and need accounted for the unique variance in global outcome fairness for the Diamond (2001) study and equity did not account for the unique variance in global outcome fairness. On the other hand, Fondacaro et al. (2002) found that all three distributive justice constructs, equity, equality, and need accounted for unique variance in global outcome fairness. These findings demonstrate the context specificity of procedural and distributive justice constructs. Younger adolescents appraisals for both global procedural and distributive fairness are similar to older adolescents, however, younger adolescents find fewer dimensions to be important in the overall appraisal of both procedural and distributive justice. In conclusion, Diamond (2001) indicated a need to further refine FJI-Y through factor analysis to help identify empirically grounded procedural and distributive justice dimensions, and to help guide basic and applied research on parent-adolescent conflict resolution.

Purpose of the Study

Although family conflicts are universal, especially during early and middle adolescence, the manner in which conflicts are resolved differ among families. Procedural and distributive justice research in the context of family decision-making could explain how different families resolve conflicts and what aspects of justice appraisals are important to promoting a healthy family environment for younger adolescents. This could, in turn, prevent behavior problems outside the family. Studies have shown that adolescents are at an increased risk for psychological and behavioral problems when raised in a family environment with high levels of conflict and low levels of support. Ongoing family conflicts have been linked to low self-confidence, psychological distress, and behavior problems in adolescents (Daniels & Moos, 1990; Fondacaro et al., 1998; Jaycox and Repetti, 1993; Kleinman, Handal, Enos, Searight, & Ross, 1989). In contrast, studies have shown family cohesion appears to reduce psychological stress, which can also decrease levels of delinquent behaviors (Feldman & Weinberg, 1994; Hirshfeld & Blumenthal, 1986). Family-level cohesion as perceived by adolescents reflects the amount of emotional closeness or distance the child feels towards his/her parent(s) (Wentzel & Feldman, 1996).

Studies have linked justice appraisals of parental fairness to psychological well-being, psychological distress, and deviant behavior in older adolescents (e.g., Fondacaro et al., 1998; Joubert, 1991; Roberts & Bengton, 1993). Therefore, research on procedural and distributive justice within the context of resolving family conflicts could lead to finding constructive ways of resolving disputes that promote psychological wellness and prevent deviant behavior during early and middle adolescence. This research may help parents understand how to interact with their children to allow for higher levels of family cohesion and lower levels of family conflict. Procedural justice research could also help with youth violence prevention through educating parents on how to resolve conflicts with their children, especially adolescents. Parents who become knowledgeable about some of the underlying processes of conflict resolution may learn to foster feelings of justice and fairness within their families to minimize family conflict and encourage family cohesion. Moreover, learning about productive means of resolving conflicts between younger adolescents and their parents could be helpful to teaching parents how to foster positive conflict resolution skills in their children, which could in turn, prevent problems in older adolescence or adulthood.

Formulating specific predictions concerning adolescents' view of procedural and distributive justice was difficult due to the paucity of research in this area. In view of that, the general hypothesis guiding this research was that adolescents value the principles of procedural and distributive justice that are fundamental to decision-making. Furthermore, adolescents may begin to feel a strong sense of injustice and resentment if they feel that their parents are not adhering to these principles when resolving a conflict. This could lead to a family atmosphere of high conflict and low support, which could result in behavior problems outside the family context (e.g., Fondacaro et al., 1998)

Fondacaro and his colleagues (Fondacaro et al., 2002; Jackson & Fondacaro, 1999; Fondacaro et al., 1998; Diamond, 2001) have begun to systematically develop measures of procedural and distributive justice constructs for older adolescents (ages 18 to 22 years) and younger adolescents (ages 11 to 18 years). The present study was a variation of the studies conducted by Fondacaro and his colleagues. They researched participants who ranged in age from 18 to 22 years and represented the period of older adolescence. The current study was concerned with the stage of adolescence ranging from age 11 to 18 years or children in sixth through twelfth grade. This study examined how procedural and distributive justice in resolving family disputes is associated with adolescent psychosocial adaptation. One of the goals of this study was to establish the validity of the FJI-Y. Therefore, the relationship between all of the original indices of procedural and distributive justice and family cohesion, family conflict, psychological well-being, psychological distress, and deviant behavior were investigated.

Hypotheses Tested

(1) Exploratory factor analyses examined whether there were as many procedural and distributive justice criteria as originally conceptualized based on the research of Diamond (2001) and Fondcaro et al. (2002). Some of the separate procedural justice domains would be grouped together, because they were too conceptually similar to be considered distinct domains. The procedural justice component of this study consisted of Thibaut and Walker's (1975) concept of process control, Leventhal's (1980) dimensions of accuracy, consistency, correction, personal respect (ethicality), neutrality (impartiality), and voice, Tyler's (1994; 1989) concepts of standing and trust. The distributive justice component was comprised of equity, equality, and need dimensions to reflect distributive justice research (e.g., Deutsch, 2000; Lind & Tyler, 1988). Additionally, Thibaut and Walker's (1975) concept of decision control was considered a distributive justice dimension. Although decision control originally emerged in the context of procedural justice, this study classifies it as a distributive justice domain, because it refers to direct control over the outcome. Definitions for the

procedural and distributive justice dimensions are provided in Appendix A.

(2) Based on the research by Fondacaro et al. (2002), the procedural and distributive justice indices would be positively associated with family cohesion and negatively related to family conflict. For the purposes of this study, family cohesion refers to the amount of emotional closeness the adolescent feels toward his/her parent(s) as well as the overall feeling of togetherness within the family. Family conflict refers to the degree of discord within the family perceived by the adolescent.

(3) Based on research indicating a link between justice appraisals of parental fairness and psychological well-being, psychological distress, and deviant behavior in older adolescents (e.g., Fondacaro et al., 1998; Joubert, 1991; Roberts & Bengton, 1993) the procedural and distributive justice indices would be positively related to psychological well-being, and negatively related to psychological distress, and deviant behavior. Psychological well-being refers to an individuals' level of general happiness and self-worth. Psychological distress refers to a combination of feelings of depression and their current state of anxiety. Finally, deviant behavior was measured by the degree to which the adolescent chooses to

do delinquent acts such as hitting someone, stealing, or damaging property and the amount of health risk an adolescent engages in such as smoking, drinking, and drug use.

(4) Similar to the findings of Fondacaro et al. (2002), this study expected to find only the procedural justice factors to account for unique variance in family functioning when both the procedural and distributive justice factors were entered simultaneously into a regression equation. Therefore, this study expected younger adolescents to care more about how they were treated during the process of resolving disputes than the final outcome.

(5) As a result of the research by Hicks and Lawrence (1993), which suggested that gender effects in adolescents' perspectives on procedural justice may mirror gender differences in distributive justice research (e.g., Furby, 1986), males and females were separated into two groups to compare male and female adolescents' judgments of procedural and distributive fairness within the family context. Due to the context specificity and the paucity of research, it was difficult to formulate specific hypotheses about how male and female adolescents would view the importance of procedural and distributive justice criteria

within the family. Therefore, this part of the study was exploratory in nature. For each group of males and females the relationship between all indices of procedural and distributive justice and family cohesion, family conflict, psychological well-being, psychological distress, and deviant behavior was investigated. Additionally, multiple regression analyses were used to determine the best predictors of procedural and distributive justice constructs of both groups for family cohesion, family conflict, psychological well-being, psychological distress, and deviant behavior.

CHAPTER 3
MATERIALS AND METHODS

Participants

Participants consisted of 165 students between the ages of 11 and 18 years ($\underline{M}$ = 14.6 years, $\underline{SD}$ = 1.9) from regular education schools in northern Florida. Fourteen Alachua County Public Schools of Florida were actively pursued to participate in this study. All schools were given a variety of incentives to participate such as a presentation on conflict resolution, extra credit for the students, and a pizza party. However, only Ft. Clarke Middle School ($\underline{N}$ = 24), Kanapaha Middles School ($\underline{N}$ = 26), Eastside High School ($\underline{N}$ = 30), and P.K. Yonge Developmental Research School ($\underline{N}$ = 85) participated. Each school elected to take part in one or all of the aforementioned incentives. The greatest response came from P.K. Yonge Developmental Research School (PKY). PKY's mission is to participate and support research for school improvement and to serve schools in Florida. Therefore, PKY is very supportive of research from the University of Florida, which made collecting data much easier at this school compared to other schools.

The sample consisted of 6.1% Hispanic American (N = 10), 45.7% Caucasian (N = 75), 27.4% African American (N = 45), and 3.0% Asian American participants (N = 5), which is fairly comparable to the demographics in Alachua County. Approximately seventeen percent of the participants (N = 29) indicated "other" as their ethnic origin. Sixty-three percent of the participants were girls (N = 104) and 37% were boys (N = 61). The sample consisted of 24 sixth, 15 seventh, 11 eighth, 43 ninth, 26 tenth, 30 eleventh, and 16 twelfth graders. Forty-seven percent of the participants had parents who were married (N = 77). All participants were treated in accordance with the "Ethical Principles of Psychologists and Code of Conduct" (American Psychological Association, 1992).

Materials

The Family Justice Inventory--Youth Form (FJI-Y) is a questionnaire battery consisting of several sections. Participants were administered a demographic sheet (gender, grade, school, age, ethnicity, parents' marital status, and who lives in the household) and the Family Decision-Making Questionnaire-Youth Form (FDMQ-Y) (i.e., Diamond, 2001). The participants were also administered a battery of questionnaires to address family and psychosocial functioning which included the Family Environment Scale (FES) and the Daily Problems and Health-Youth Form (Moos & Moos, 1986; Ebata & Moos 1991). For the purpose of future studies, the Aspects of Identity Questionnaire (AIQ-IIIx) also was administered (Cheek, Tropp, Chen, & Underwood, 1994).

Family Decision-Making Questionnaire-Youth Form (FDMQ-Y)

The FDMQ-Y consists of three sections. In the first section, participants were asked to think about an important conflict or dispute they had with one or both of their parents over the past 12 months. If they did not experience an important conflict, they were instructed to list any situation involving a dispute or disagreement with their parents where a decision was made that affected them or others.

In the second section of the FDMQ-Y, participants were instructed to answer a series of questions about who was involved in the conflict situation they described (e.g., mother, father, sibling), when it occurred, whether it was resolved, and how long it took to resolve the conflict.

The third part of the FDMQ-Y asked participants to carefully read each of the procedural and distributive justice items and to use each item to rate the conflict situation they described on a 5-point scale, ranging from one (strongly disagree) to five (strongly agree). The procedural and distributive justice components consisted of 13 six-item subscales. The procedural justice component consisted of nine subscales (accuracy, consistency, correction, personal respect, neutrality, process control, standing, trust, and voice). The distributive justice component consisted of four subscales (decision control, equality, equity, and need). Definitions for each of the procedural and distributive justice dimensions are provided in Appendix A.

Family Functioning

After finishing the FDMQ-Y, participants completed the Family Relationships Inventory (FRI) to assess family functioning. The FRI consists of three subscales (cohesion, conflict, expressiveness) derived from the Family Environment Scale (FES; Moos & Moos, 1986). The FRI measures the current quality of social relationships in the family. Family cohesion assesses the degree to which family members are helpful and supportive to each other and family conflict is a measure of the extent to which the expression of anger and physical aggression are characteristic of the family (i.e., Holahan & Moos, 1982, 1983).

Psychosocial Functioning

To address psychosocial functioning, participants completed the Daily Problems and Health-Youth Form (DPH-Y). The DPH-Y consists of measures adapted by Ebata and Moos (1991) to evaluate psychological well-being, psychological distress, and deviant behavior in adolescents, including a nine-item measure of aggressive behavior adapted from Jessor and Jessor's (1977) Deviant Behavior Scale.

Procedures

Parental consent forms were given to students approximately two weeks prior to administering the battery. Participants who returned signed parental consent forms were given the questionnaire during a 50-minute class period. Groups of approximately 15 participants completed the battery during each administration. Participants were told they could ask questions of the investigator and they had the right to withdraw from the study at any time. Consent forms were handed out and upon returning a signed consent form, participants were handed a battery. The battery was completed in the same order for all participants from the first page of the questionnaire to the last.

Some participants could not complete the questionnaire during the first session. In these cases, the investigator returned to the school within two days to administer the uncompleted portion of the questionnaire. Those who could not complete the questionnaire during the first session were instructed to record and remember the coded number of their questionnaire. During the second administration, the investigator administered the incomplete batteries to the persons with the corresponding coded number in order to ensure that the questionnaires were distributed correctly.

CHAPTER 4
RESULTS

Factor Analyses

Factor analyses were used to identify and validate empirically grounded procedural and distributive justice dimensions as well as reduce the total number of items to a smaller set of variables. Separate factor analyses were run for the procedural and distributive justice items. Factor scores derived from procedural and distributive justice dimensions were used first in correlation analyses to evaluate the relationship between justice appraisals and family functioning (i.e., family conflict, family cohesion) and individual functioning (i.e., psychological well-being, psychological distress and deviant behavior). Next, factor scores were used in separate regression analyses to predict family and individual functioning. Then, separate correlation and regression analyses for the males and females were run to compare their perception of justice appraisals. Additionally, procedural and distributive justice factor scores were entered in the same regression equation to predict family and individual functioning for all adolescent participants. Finally, hierarchical multiple regression analyses were conducted to determine whether procedural justice factors were better predictors than distributive justice factors of family and individual functioning.

For factor analysis, factors with eigenvalues greater than 1 were retained. Salient loading of items on each factor was defined as +/- .50.

Procedural Justice Factor Analysis

Without specifying the number of factors to be extracted, 54 procedural justice items comprising nine procedural justice domains (i.e., accuracy, consistency, correction, personal respect, neutrality, process control, standing, trust, voice) were subjected to a principle components factor analysis with varimax rotation. The results of the factor loadings from the procedural justice items are presented in Table 1.

Eight factors with eigenvalues greater than one were extracted. The eight factors accounted for 66% of the total variance in procedural justice. Factor I was labeled Process Control and accounted for 45% of the total variance. The items with the greatest loadings on this factor reflected perceptions of having input during the decision-

Table 1

Factor Loadings from Procedural Justice Items

	I	II	III	IV	V
	PC	N	PR	SR	C
Accuracy					
5	.32	.49	.32	.05	.11
15	.21	.54	.17	.09	.18
18	.45	.61	.12	.21	.16
40	.26	.63	.30	.21	.30
49	.36	.56	.41	.09	.10
63	.43	.27	.52	.17	.33
Consistency					
3	.11	.13	.19	.77	.09
6	.02	.24	.38	.56	.06
16	.04	.02	.33	.41	.17
32	.07	.07	.41	.57	.22
35	.11	.07	.30	.50	.22
78	.28	.30	.50	.15	.27
Correction					
12	.44	.27	.15	.04	.17
23	.05	.01	.02	-.03	.09
55	.22	.63	.20	.27	.03
68	.19	.24	.30	.12	.57
79	.15	.31	.15	.27	.58
81	.38	.17	.07	.01	.66
Personal Respect					
22	.38	.41	.52	.24	.13
29	.37	.47	.40	.22	.14
37	.35	.43	.54	.26	-.02
44	.18	.22	.56	.41	-.08
46	.40	.45	.54	.28	.06
85	.19	.25	.58	.15	.14
Neutrality					
7	.29	.48	.46	.22	.10
14	.18	.32	-.12	.60	.20
17	.62	.45	.20	.16	.21
39	.28	.66	.12	.25	.35
54	.48	.47	.18	.27	.31
57	.54	.38	.27	.19	.28

Table 1. Continued

	I PC	II N	III PR	IV SR	V C
Process Control					
19	.51	-.03	.14	-.03	.17
25	.76	.22	.23	.17	.16
38	.79	.30	.24	.21	.17
45	.63	.31	.17	.09	.37
53	.76	.21	.29	.12	.19
82	.61	.18	.03	.05	.51
Standing					
8	.27	.21	.19	.60	-.06
33	.16	.22	.52	.52	-.04
50	.46	.16	.52	.26	-.01
52	.51	.29	.54	.13	.20
64	.30	.24	.71	.18	.27
83	.26	.17	-.06	.61	.01
Trust					
11	.21	.51	.39	.27	.03
34	.30	.43	.41	.21	.00
36	.34	.63	.29	.21	.17
47	.00	.20	.17	.11	-.00
58	.38	.49	.37	.16	.12
70	.45	.15	.53	.23	.13
Voice					
1	.51	.35	.19	.03	-.01
20	.77	.29	.21	.17	.05
27	.69	.36	.42	.09	.04
41	.50	.12	.04	.25	-.08
67	.50	.21	.32	.13	.36
77	.57	.31	.30	.25	.25

making process (e.g., "You had an opportunity to present your side of the story"; "You had some say in how the situation would be handled before a final decision was made"). Factor II was labeled Neutrality and accounted for an additional 6% of the total variance. The items with the highest loadings on this factor generally represented the perception that their parents lacked bias and handled the process in an organized manner (e.g., "The procedures followed, rules applied, or approach taken by your parent(s) was effective in assuring that the situation was handled in a neutral manner;" "Your parent(s) seemed well-organized in how they handled things"). Factor III accounted for an additional 3% of the total variance and was labeled Personal Respect. The items with the highest loadings on this factor reflected perceptions of being treated with dignity and respect (e.g., "Your parent(s) treated you as if you are somebody really important;" "Your parents treated you in a dignified manner"). Factor IV accounted for an additional 3% of the total variance and was labeled Status Recognition. The items with the highest loadings on this factor generally represented comparative judgments reflecting perceptions of being respected as a valued member in the decision making process (e.g., "Your parent(s) favored others over you;" "You were treated by your parent(s) as if you didn't matter"). Factor V accounted for an additional 3% of the variance and was labeled Correction. The items with the highest loadings reflected the perception of being able to change the decision during the decision-making process (e.g., "You had a chance to have the decision reconsidered;" "Any wrong decisions in this situation could be easily corrected"). The remaining three factors each accounted for an additional 2% of the variance. However, only one item in each factor had a loading of .50 or higher. Therefore, these factors were not labeled nor used in regression analyses.

Distributive Justice Factor Analysis

Without specifying the number of factors to be extracted, 24 distributive justice items comprising four distributive justice domains (i.e., decision control, equity, equality, and need) were subjected to a principle components factor analysis with varimax rotation. The results of the factor loadings from the distributive justice items are presented in Table 2.

Five factors with eigenvalues greater than one were extracted. The five factors accounted for 63% of the total variance in distributive justice. Factor I was labeled Equality and accounted for 37% of the total variance. Items with the highest loadings on this factor reflected decisions

Table 2

Factor Loadings from Distributive Justice Items

	I EQUAL	II DC	III NEED	IV EQUITY
Decision Control				
13	.21	.77	.16	.15
26	.13	.73	.15	.12
30	.23	.76	.27	.13
56	.32	.74	.19	.07
69	.27	.62	.10	.16
84	-.09	-.66	.08	.13
Equity				
1	.17	.22	.37	.51
3	.25	.62	.12	.04
5	-.06	.02	-.02	.82
6	.28	.12	-.08	.73
8	.51	.39	-.06	.13
41	.17	.05	.17	.73
Equality				
11	.57	.28	.09	.14
13	.65	.16	-.10	.04
14	.77	.21	.26	.16
28	.75	.25	.27	.17
32	.70	.17	.33	.18
38	.65	.14	.12	.03
Need				
15	.18	.26	.76	.05
16	.30	.09	.79	.03
17	.42	.32	.51	.20
19	.62	.34	.14	.06
20	.10	.13	.31	.06
22	.66	.32	.30	.14

based on dividing resources equally (e.g., "In this situation you felt that you received an equal share;" The outcome of this situation met your desire for equality"). Factor II was labeled Decision Control and accounted for an additional 8% of the variance. Items that loaded the highest on this factor reflected perceptions of control over the actual decision made (e.g., "You had a lot of influence over the decision made;" "You had some control over the decision that was made"). Factor III accounted for and additional 7% of the variance and was labeled Need. The items that loaded highest on this factor reflected perceptions that the decision-making outcome was based on helping those with the greatest need (e.g., "The decision seemed to help the person who needed it most;" "The outcome here was based on helping the person who needed the most help"). Factor IV accounted for an additional 6% of the variance and was labeled Equity. The items that loaded highest on this factor reflected perceptions that the final outcome of the decision was based on prior contributions (e.g., "Your past behaviors greatly affected the outcome you and your parent(s) reached in this situation;" "Your past behavior was fairly taken into consideration in how this situation was resolved"). The fifth factor accounted for an additional 5% of the variance. However, only one item in this factor had a factor loading of .50 or higher. Therefore, this factor was not labeled nor used in regression analyses.

Overall, factor analyses results were consistent with the first prediction. Separate procedural justice domains were grouped together because they were too conceptually similar to be considered distinct domains. Five interpretable procedural justice factors were identified that reflected theory and empirical research in procedural justice literature. For distributive justice, distinct factors were retained for equity, equality, need, and decision control. These results also indicate that procedural and distributive justice are multidimensional concepts. Factor scores retained from factor analyses were used in correlation and separate regression analyses for family and individual functioning of adolescents.

Procedural Justice Factors and Family Functioning

Correlation analyses revealed that three procedural justice factors were significantly related to family conflict (Neutrality, $r = -.18$, $p < .05$; Personal Respect, $r = -.24$, $p < .01$; Status Recognition, $r = -.37$, $p < .001$). The five procedural justice factors accounted for 22% ($F[5, 159] = 10.15$, $p < .001$) of the adjusted variance in family conflict when all of the procedural justice factors were entered simultaneously in a regression equation to predict family conflict. The same three procedural justice factors (Neutrality $\beta = -.18$, $p < .05$; Personal Respect $\beta = -.24$, $p < .01$; Status Recognition ($\beta = -.37$, $p < .001$) accounted for unique variance in family conflict. The standardized beta weights for each regression analysis using procedural justice factor scores to predict family functioning are presented in Table 3.

Correlation analyses indicated that all five procedural justice factors were significantly related to family cohesion (Process Control, $r = .20$, $p < .05$; Neutrality $r = .28$, $p < .001$; Personal Respect $r = .39$, $p < .001$; Status Recognition $r = .25$, $p < .01$; Correction $r = .18$, $p < .05$). The five procedural justice factors accounted for 34% ($F[5, 159] = 17.39$, $p < .001$) of the adjusted variance in family cohesion when all of the procedural justice factors were entered simultaneously in a regression equation to predict family cohesion. All of the procedural justice factors accounted for unique variance in family cohesion (Process Control $\beta = .20$, $p < .01$; Neutrality $\beta = .28$, $p < .001$; Personal Respect $\beta = .39$, $p < .001$; Status Recognition $\beta = .25$, $p < .001$; Correction $\beta = .18$, $p < .01$). The standardized beta weights for each regression analysis using

Table 3

Multiple Regression Using Procedural Justice Factor Scores to Predict Family Functioning For Adolescents (N = 159)

	Family Conflict β	Family Cohesion β
Process Control	-.11	.20**
Neutrality	-.18*	.28***
Personal Respect	-.24**	.39***
Status Recognition	-.37***	.25***
Correction	-.10	.18**
Adjusted $\underline{R}^2$	.22***	.34***

Note: Sample size varies across tables due to incomplete questionnaires.

*$p < .05$, **$p < .01$, ***$p < .001$

procedural justice factor scores to predict family functioning are presented in Table 3.

Procedural Justice Factors and Individual Functioning

Correlation analyses indicated that Neutrality (r = .25, $p < .01$) Personal Respect (r = .19, $p < .05$), and Status Recognition (r = .16, $p < .05$) were significantly related to an individual's psychological well-being. When all of the procedural justice factors were entered simultaneously in a regression equation to predict an individual's psychological well-being, the five procedural justice factors accounted for 9% ($F[5, 150] = 4.10$, $p < .01$) of the adjusted variance in a person's psychological well-being. Neutrality ($\beta = .25$, $p < .01$) Personal Respect ($\beta = .19$, $p < .05$), and Status Recognition ($\beta = .16$, $p < .05$) accounted for unique variance in an individual's psychological well-being. The standardized beta weights for each regression analysis using procedural justice factor scores to predict individual functioning are presented in Table 4.

Once again, correlation analyses indicated that Neutrality ($r = -.21$, $p < .05$) Personal Respect ($r = -.19$, $p < .05$), and Status Recognition ($r = -.27$, $p < .01$) were significantly related to an individual's psychological distress. When all of the procedural justice factors were entered simultaneously in a regression equation to predict a person's psychological distress, the five procedural justice factors accounted for 13% ($F[5, 146] = 5.16$, $p < .001$) of the adjusted variance in adolescents' psychological distress. Neutrality ($\beta = -.21$, $p < .01$) Personal Respect ($\beta = -.19$, $p < .05$), and Status Recognition ($\beta = -.27$, $p < .01$) also accounted for unique variance in an individual's psychological distress. The standardized beta weights for each regression analysis using procedural justice factor scores to predict individual functioning are presented in Table 4.

Correlation analyses indicated that none of the procedural justice factors were significantly related to deviant behavior. Additionally, the five procedural justice factors did not account for a significant amount of adjusted variance in deviant behavior ($F[5, 149] = 1.08$, $p > .05$) when all of the procedural justice factors were entered simultaneously in a regression equation to predict deviant behavior. Standardized beta weights for each regression analysis using procedural justice factor scores to predict individual functioning are presented in Table 4.

Table 4

Multiple Regression Using Procedural Justice Factor Scores to Predict Individual Functioning For Adolescents

	Psychological Well-Being (N=150)	Psychological Distress (N=146)	Deviant Behavior (N=149)
	β	β	β
Process Control	.03	-.06	.05
Neutrality	.25**	-.21**	-.12
Personal Respect	.19*	-.19*	-.08
Status Recognition	.16*	-.27**	-.12
Correction	.05	-.01	-.00
Adjusted R^2	.10**	.13***	.00

Note: Sample size varies across tables due to incomplete questionnaires.

*$p < .05$, **$p < .01$

Distributive Justice Factors and Family Functioning

Correlation analyses indicated that Equality ($r = -.33$, $p < .001$) was the only distributive justice factor significantly related to family conflict. The four distributive justice factors accounted for 12% ($F[4, 159] = 6.59$, $p < .001$) of the adjusted variance in family conflict when all of the distributive justice factors were entered simultaneously in a regression equation to predict family conflict. Again, Equality ($\beta = -.33$, $p < .001$) was the only distributive justice factor to account for unique variance in family conflict. The standardized beta weights for each regression analysis using distributive justice factor scores to predict family functioning are presented in Table 5.

Correlation analyses indicated that Equality ($r = .29$, $p < .001$) and Need ($r = .30$, $p < .001$) were significantly related to family cohesion. The four distributive justice factors accounted for 17% ($F[4, 159] = 9.27$, $p < .001$) of the adjusted variance in family cohesion when all of the distributive justice factors were entered simultaneously in a regression equation to predict family cohesion. Three of the four distributive justice factors accounted for unique variance in family cohesion (Decision Control ($\beta = .15$, $p < .05$); Equality $\beta = .29$, $p < .001$; Need $\beta = .30$, $p < .001$).

Table 5

Multiple Regression Using Distributive Justice Factor Scores to Predict Family Functioning For Adolescents (N = 159)

	Family Conflict β	Family Cohesion β
Equality	-.33***	.29***
Decision Control	-.11	.15*
Need	-.13	.30***
Equity	.09	-.01
Adjusted R^2	.12***	.17***

Note: Sample size varies across tables due to incomplete questionnaires.

*$p < .05$, **$p < .01$, ***$p < .001$

The standardized beta weights for each regression analysis using distributive justice factor scores to predict family functioning are presented in Table 5.

Distributive Justice Factors and Individual Functioning

Correlation analyses indicated that Equality was the only distributive justice factor to be significantly related to an individual's psychological well-being ($r = .20$, $p < .05$), psychological distress ($r = -.25$, $p < .01$) and deviant behavior ($r = -.18$, $p < .05$). Furthermore, Equality was the only distributive justice factor to account for unique variance in adolescents' psychological well-being ($\beta = .20$, $p < .05$), psychological distress ($\beta = -.25$, $p < .01$), and deviant behavior ($\beta = -.18$, $p < .05$) when all the distributive justice factors were entered simultaneously in regression equations to predict individual functioning. The four distributive justice factors did not account for a significant amount of adjusted variance in an individual's psychological well-being ($F[4, 150] = 1.61$, $p > .05$) or deviant behavior ($F[4, 149] = 1.48$, $p > .05$). However, the four distributive justice factors accounted for 5% ($F[4, 146] = 2.94$, $p < .05$) of the adjusted variance in adolescents' psychological distress. The standardized beta weights for each regression analysis using distributive justice factor scores to predict individual functioning are presented in Table 6.

As suggested in the second hypothesis, the procedural and distributive justice indices that were significantly related to family functioning were positively related to family cohesion and negatively related to family conflict. Consistent with the third hypothesis, the procedural and distributive justice indices that were significantly related to individual functioning were positively associated with adolescents' psychological well-being and negatively associated with adolescents' psychological distress and deviant behavior.

Procedural and Distributive Justice Factors and Family Functioning

The five procedural and four distributive justice factors were combined as predictors and entered simultaneously in separate regression analyses to predict family conflict and family cohesion. The nine procedural and distributive justice factors accounted for 22% (F[9, 159] = 6.08, $p < .001$) of the adjusted variance in family conflict when all of the procedural and distributive justice factors were entered simultaneously in a regression equation

Table 6

Multiple Regression Using Distributive Justice Factor Scores to Predict Individual Functioning For Adolescents

	Psychological Well-Being (N=150)	Psychological Distress (N=146)	Deviant Behavior (N=149)
	β	β	β
Equality	.20*	-.25**	-.18*
Decision Control	-.00	-.10	.04
Need	.04	-.08	.00
Equity	.05	-.01	.07
Adjusted R^2	.02	.05*	.01

Note: Sample size varies across tables due to incomplete questionnaires.

$*p < .05$, $**p < .01$

to predict family conflict. Personal Respect ($\beta = -.18$, $p < .05$) and Status Recognition ($\beta = -.34$, $p < .001$) were the only factors to account for unique variance in family conflict. Furthermore, none of the distributive justice factors accounted for unique variance in family conflict. These results were consistent with the fourth hypothesis, which predicted that only the procedural justice criteria would account for unique variance in family functioning when both the procedural and distributive justice factors were combined. The standardized beta weights for each regression analysis using procedural and distributive justice factor scores to predict family functioning are presented in Table 7.

The nine procedural and distributive justice factors accounted for 35% ($F[9, 159] = 10.48$, $p < .001$) of the adjusted variance in family cohesion when all of the procedural and distributive justice factors were entered simultaneously in a regression equation to predict family cohesion. All of the procedural justice factors (Process Control $\beta = .18$, $p < .05$; Neutrality $\beta = .31$, $p < .001$; Personal Respect $\beta = .39$, $p < .001$; Status Recognition $\beta = .27$, $p < .001$; Correction $\beta = .20$, $p < .01$) and none of the distributive justice factors accounted for unique variance

Table 7

Multiple Regression Using Both Procedural and Distributive Justice Factor Scores to Predict Family Functioning For Adolescents (N = 159)

	Family Conflict β	Family Cohesion β
Process Control	-.03	.18*
Neutrality	-.12	.31***
Personal Respect	-.18*	.39***
Status Recognition	-.34***	.27***
Correction	-.05	.20**
Equality	-.14	-.09
Decision Control	-.07	-.01
Need	-.08	.14
Equity	.08	-.04
Adjusted $\underline{R}^2$	.22***	.35***

Note: Entries are standardized β weights.

*$\underline{p} < .05$, **$\underline{p} < .01$, ***$\underline{p} < .001$

Note: Sample size varies across tables due to incomplete questionnaires.

in family cohesion. The standardized beta weights for each regression analysis using procedural and distributive justice factor scores to predict family functioning is presented in Table 7.

Procedural and Distributive Justice Factors and Individual Functioning

The five procedural and four distributive justice factors were combined as predictors and entered simultaneously in separate regression analyses to predict adolescents' psychological well-being, psychological distress, and deviant behavior. The nine procedural and distributive justice factors accounted for 8% ($F[9, 150] = 2.38$, $p < .05$) of the adjusted variance in adolescents' psychological well-being when all of the procedural and distributive justice factors were entered simultaneously in a regression equation to predict adolescents' psychological well-being. Neutrality $\beta = .28$, $p < .01$, Personal Respect $\beta = .22$, $p < .05$, and Status Recognition $\beta = .17$, $p < .05$ accounted for unique variance in adolescents' psychological well-being. The standardized beta weights for each regression analysis using procedural and distributive justice factor scores to predict individual functioning are presented in Table 8.

Table 8

Multiple Regression Using Both Procedural and Distributive Justice Factor Scores to Predict Individual Functioning For Adolescents

	Psychological Well-Being (N=150)	Psychological Distress (N=146)	Deviant Behavior (N=149)
	β	β	β
Process Control	.10	.02	.07
Neutrality	.28**	-.16	-.06
Personal Respect	.22*	-.15	-.03
Status Recognition	.17*	-.25**	-.08
Correction	.09	.04	.03
Equality	-.06	-.10	-.14
Decision Control	-.09	-.10	.00
Need	-.06	-.05	-.01
Equity	.03	-.02	.07
Adjusted R^2	.08*	.11**	-.01

Note: Sample size varies across tables due to incomplete questionnaires.

$*p < .05$, $**p < .01$

The nine procedural and distributive justice factors accounted for 11% ($F[9, 146] = 2.96$, $p < .01$) of the adjusted variance in adolescents' psychological distress when all of the procedural and distributive justice factors were entered simultaneously in a regression equation to predict adolescents' psychological distress. Status Recognition ($\beta = -.25$, $p < .01$) was the only factor to account for unique variance in adolescents' psychological distress. The standardized beta weights for each regression analysis using procedural and distributive justice factor scores to predict individual functioning are presented in Table 8.

The nine procedural and distributive justice factors ($F[9, 149] = .89$, $p > .05$) did not account for a significant amount of the adjusted variance in deviant behavior when all of the procedural and distributive justice factors were entered simultaneously in a regression equation to predict deviant behavior. Furthermore, none of the nine procedural and distributive justice factors accounted for unique variance in deviant behavior. The standardized beta weights for each regression analysis using procedural and distributive justice factor scores to predict individual functioning are presented in Table 8.

Procedural and Distributive Justice Factors in Hierarchical Multiple Regression and Family Functioning

Hierarchical multiple regression analyses were conducted to determine whether procedural justice factors are more important predictors of family conflict and family cohesion than distributive justice factors. Family conflict was the outcome variable of the first hierarchical multiple regression analysis, which was conducted in two steps. The model was significant ($F[4, 159] = 6.59$, $p < .001$) when the four distributive justice factors were entered on the first step and accounted for 12% of the adjusted variance in family conflict. When the five procedural justice items were entered on the second step, the model remained significant ($F[9, 159] = 6.08$, $p < .001$), and accounted for an additional 10% of the total adjusted variance, bringing the total adjusted variance accounted for up to 22%. The 10% increase in variance accounted for by the procedural justice factors was significant (F Change $[9, 159] = 4.99$, $p < .001$). In the second hierarchical multiple regression analysis of family conflict the procedural justice factors were entered on the first step and the distributive justice factors were entered on the second step. The model was significant ($F[5, 159] = 10.15$, $p < .001$) after the first step and accounted for 22% of the adjusted variance. The model was once again significant (F[9, 159] = 6.08, $p < .01$) when the distributive justice factors were entered on the second step. However, the distributive justice factors did not account for an additional amount of the adjusted variance in family conflict (F Change [9, 159] = .99, $p > .05$).Hierarchical multiple regression analyses predicting family cohesion were conducted in the same two steps as hierarchical multiple regression analyses predicting family conflict. When the four distributive justice factors were entered on the first step, the model was significant (F[4, 159] = 9.27, $p < .001$), and accounted for 17% of the adjusted variance in family cohesion. When the five procedural justice items were entered on the second step, the model was remained significant (F[9, 159] = 10.48, $p < .001$), and accounted for an additional 18% of the total adjusted variance, bringing the total adjusted variance accounted for up to 35% in family cohesion. The 18% increase in variance accounted for by the procedural justice factors was significant (F Change [9, 159] = 9.43, $p < .001$). In the next hierarchical regression analysis, the procedural justice factors were entered on the first step and the distributive justice factors were entered on the second step. The model was significant (F[5, 159] = 17.39, $p < .001$) after the first step and accounted for 34% of the adjusted variance. The model was once again significant ($F[9, 159] = 10.48$, $p < .001$) when distributive justice factors were entered on the second step. The distributive justice factors accounted for an additional 1% of the adjusted variance in family cohesion, bringing the total adjusted variance accounted for to 35%. The 1% increment in variance accounted for by the distributive justice factors was not significant (F Change $[9, 159] = 1.53$, $p > .05$).

Procedural and Distributive Justice Factors in Hierarchical Multiple Regression and Individual Functioning

Hierarchical multiple regression analyses were conducted to determine whether procedural justice factors would be more important predictors of individual functioning (i.e., psychological well-being, psychological distress, deviant behavior) than distributive justice factors. Each hierarchical multiple regression analysis was conducted in two steps. In the first analysis, the four distributive justice factors were entered on the first step to predict adolescents' psychological well-being. This model was not significant ($F[4, 150] = 1.61$, $p > .05$). When the five procedural justice items were entered on the second step, the model became significant ($F[9, 150] = 2.38$, $p < .05$), and accounted for 8% of the total adjusted variance. There was a 6% change in variance accounted for by the procedural justice factors, which was significant (F Change [9, 150] = 2.90, $p < .05$). In next hierarchical multiple regression analysis the procedural justice factors were entered on the first step and the distributive justice factors were entered on the second step to predict adolescents' psychological well-being. The model was significant (F[5, 150] = 4.10, $p < .01$) after the first step and accounted for 9% of the adjusted variance in adolescents' psychological well-being. When the distributive justice factors were entered on the second step, the model was once again significant (F[9, 150] = 2.38, $p < .05$). However, the distributive justice factors did not account for an additional amount of the adjusted variance in adolescents' psychological well-being (F Change [9, 150] = .31, $p > .05$).

For psychological distress, the four distributive justice factors were entered on the first step of a hierarchical regression analysis. This model was significant (F[4, 146] = 2.94, $p < .05$) and accounted for 5% of the adjusted variance in adolescents' psychological distress. When the five procedural justice items were entered on the second step, the model remained significant (F[9, 146] = 2.96, $p < .01$) and accounted for an additional 6% of the total adjusted variance, bringing the total adjusted variance accounted for by the model up to 11%. The

6% increase in variance accounted for by the procedural justice factors was significant (F Change [9, 146] = 2.83, $p < .05$). In the second hierarchical multiple regression analysis the procedural justice factors were entered on the first step and the distributive justice factors were entered on the second step to predict adolescents' psychological distress. The model was significant (F[5, 146] = 5.16, $p < .001$) after the first step and accounted for 13% of the adjusted variance in adolescents' psychological distress. When the distributive justice factors were entered on the second step, the model remained significant (F[9, 146] = 2.96, $p < .01$). However, the distributive justice factors did not account for an additional amount of the adjusted variance in adolescents' psychological distress, and the adjusted variance declined to 11% accounted for by the model.

For deviant behavior none of the models were significant. When the four distributive justice factors were entered on the first step of a hierarchical regression analysis the model was not significant (F[4, 149] = 2.10, $p > .05$) and did not account for a significant amount of the adjusted variance in adolescents' deviant behavior. When the five procedural justice items were entered on the second step, the model was once again not significant (F[9, 149] =

.89, p > .05). In the next hierarchical multiple regression analysis the procedural justice factors were entered on the first step and the distributive justice factors were entered on the second step to predict adolescents' deviant behavior. The model was not significant ($F[5, 149] = 1.08$, $p > .05$) after the first step and did not accounted for a significant amount of the adjusted variance in deviant behavior. When the distributive justice factors were entered on the second step, the model was again not significant ($F[9, 149] = .89$, $p > .05$), and the distributive justice factors did not account for an additional amount of the adjusted variance in adolescents' deviant behavior.

Procedural Justice Factors and Family Functioning for Male and Female Adolescents

Participants were separated into two groups of males and females to compare their appraisals of fairness within the family context. When the participants were divided into two groups of males ($N = 61$) and females ($N = 104$) the sample size for the males decreased disproportionate to the females. Regression analyses were first conducted separating the procedural and distributive justice factors then all of the factors were combined.

For male adolescents, Process Control ($r = -.27$, $p < .05$) was the only procedural justice factor to be significantly related to family conflict. Furthermore, none of the procedural justice factors accounted for unique variance in family conflict for male adolescents. *Process Control* ($r = .36$, $p < .01$), *Neutrality* ($r = .26$, $p < .05$), and *Personal Respect* ($r = .33$, $p < .05$) were significantly related to family cohesion. However, only *Process Control* ($\beta = .29$, $p < .05$) and *Personal Respect* ($\beta = .28$, $p < .05$) accounted for unique variance in family cohesion for male adolescents when all five procedural justice factors were entered simultaneously in a regression equation to predict family cohesion. The standardized beta weights for each regression analysis using procedural justice factor scores to predict family functioning for male adolescents are presented in Table 9.

For the female adolescents, *Neutrality* ($r = -.21$, $p < .05$), *Personal Respect* ($r = -.26$, $p < .01$), and *Status Recognition* ($r = -.47$, $p < .001$) were significantly related to family conflict. *Neutrality* ($\beta = -.21$, $p < .05$), *Personal Respect* ($\beta = -.26$, $p < .01$), and *Status Recognition* ($\beta = -.46$, $p < .001$) were also predictors of family conflict for female adolescents when all of the procedural justice

Table 9

Multiple Regression Using Procedural Justice Factor Scores to Predict Family Functioning For Male Adolescents (N = 58)

	Family Conflict β	Family Cohesion β
Process Control	-.25	.29*
Neutrality	-.07	.20
Personal Respect	-.18	.28*
Status Recognition	-.24	.17
Correction	-.18	.20
Adjusted R^2	.12*	.24**

Note: Sample size varies across tables due to incomplete questionnaires.

*$p < .05$, **$p < .01$, ***$p < .001$

factors were entered simultaneously in a regression equation to predict family conflict. Turning to family cohesion, Neutrality ($r = .30$, $p < .01$), Personal Respect ($r = .42$, $p < .001$), and Status Recognition ($r = .31$, $p < .01$) were once again significantly related to family cohesion for the females. All of the procedural justice factors (Process Control, $\beta = .17$, $p < .05$; Neutrality $\beta = .31$, $p < .001$; Personal Respect $\beta = .43$, $p < .001$; Status Recognition $\beta = .29$, $p < .001$; Correction $\beta = .16$, $p < .05$) accounted for unique variance in family cohesion for female adolescents. The standardized beta weights for each regression analysis using procedural justice factor scores to predict family functioning for female adolescents are presented in Table 10.

Procedural Justice Factors and Individual Functioning for Male and Female Adolescents

For males, Neutrality ($r = .30$, $p < .05$) was the only procedural justice factor to be significantly related to and a predictor of (Neutrality $\beta = .32$, $p < .05$) male adolescents' psychological well-being. Process Control ($r = -.31$, $p < .05$) was the only procedural justice factor to be significantly related to male adolescents' psychological distress. None of the procedural justice factors were

Table 10

Multiple Regression Using Procedural Justice Factor Scores to Predict Family Functioning For Female Adolescents (N = 100)

	Family Conflict β	Family Cohesion β
Process Control	-.07	.17*
Neutrality	-.21*	.31****
Personal Respect	-.26**	.43***
Status Recognition	-.46***	.29***
Correction	-.05	.16*
Adjusted R^2	.30***	.38**

Note: Sample size varies across tables due to incomplete questionnaires.

$*p < .05$, $**p < .01$, $***p < .001$

significantly related to deviant behavior for male adolescents. Furthermore, none of the procedural justice factors were predictors of male adolescents' psychological distress or deviant behavior when all of the procedural justice factors were entered simultaneously in separate regression equations to predict psychological distress and deviant behavior. The standardized beta weights for each regression analysis using procedural justice factor scores to predict individual functioning for male adolescents are presented in Table 11.

For female adolescents, *Neutrality* ($r = .22$, $p < .05$), *Personal Respect* ($r = .23$, $p < .05$), and *Status Recognition* ($r = .22$, $p < .05$) were significantly related to female adolescents' psychological well-being as well as predictors (*Neutrality* $\beta = .23$, $p < .05$; *Personal Respect* $\beta = .23$, $p < .05$; *Status Recognition* $\beta = .22$, $p < .05$) of their psychological well-being when all of the procedural justice factors were entered simultaneously in a regression equation to predict females' psychological well-being. *Personal Respect* ($r = -.22$, $p < .05$), and *Status Recognition* ($r = -.35$, $p < .01$) were significantly related to and predictors

Table 11

Multiple Regression Using Procedural Justice Factor Scores to Predict Individual Functioning For Male Adolescents (N = 55)

	Psychological Well-Being β	Psychological Distress[a] β	Deviant Behavior β
Process Control	-.12	-.27	.07
Neutrality	.32*	-.21	-.04
Personal Respect	.08	-.07	-.03
Status Recognition	.05	-.12	-.10
Correction	.08	-.10	-.14
Adjusted R^2	.03	.08	-.06

[a] Psychological Distress N = 53

Note: Sample size varies across tables due to incomplete questionnaires.

*$p < .05$, **$p < .01$

(Personal Respect $\beta = -.22$, $p < .05$; Status Recognition $\beta = -.34$, $p < .01$) of psychological distress for female adolescents. None of the procedural justice factors were significantly related to or predictors of deviant behavior for female adolescents. The standardized beta weights for each regression analysis using procedural justice factor scores to predict individual functioning for female adolescents are presented in Table 12.

Distributive Justice Factors and Family Functioning for Male and Female Adolescents

For male adolescents, Equality ($r = -.30$, $p < .05$) and Need ($r = -.38$, $p < .01$) were significantly related to family conflict. However, only Need ($\beta = -.33$, $p < .05$) accounted for unique variance in family conflict when all the distributive justice factors were entered simultaneously in a regression equation to predict family conflict for male adolescents. Equality ($r = .36$, $p < .01$) and Need ($r = .45$, $p < .001$) were significantly related to and predictors (Equality $\beta = .29$, $p < .05$; Need $\beta = .41$, $p < .01$) of family cohesion for male adolescents. The standardized beta weights for each regression analysis using distributive justice factor scores to predict family functioning for male adolescents are presented in Table 13.

Table 12

Multiple Regression Using Procedural Justice Factor Scores to Predict Individual Functioning For Female Adolescents

	Psychological Well-Being (N=94)	Psychological Distress (N=92)	Deviant Behavior (N=93)
	β	β	β
Process Control	.08	.03	.01
Neutrality	.23*	-.19	-.16
Personal Respect	.23*	-.22*	-.12
Status Recognition	.22*	-.34**	-.15
Correction	.04	.03	.09
Adjusted $\underline{R}^2$	.11**	.16*	.02

Note: Sample size varies across tables due to incomplete questionnaires.

$^*\underline{p} < .05$, $^{**}\underline{p} < .01$

Table 13

Multiple Regression Using Distributive Justice Factor Scores to Predict Family Functioning For Male Adolescents (N = 58)

	Family Conflict β	Family Cohesion β
Equality	-.24	.29*
Decision Control	-.22	.05
Need	-.33*	.41**
Equity	.03	.08
Adjusted R^2	.15*	.24**

Note: Sample size varies across tables due to incomplete questionnaires.

$^{*}p < .05$, $^{**}p < .01$

For females, *Equality* was the only distributive justice factor to be significantly related to ($r = -.35$, $p < .001$) and predict ($\beta = -.35$, $p < .001$) family conflict when all of the distributive justice factors were entered simultaneously in a regression equation to predict family conflict for female adolescents. *Equality* ($r = .25$, $p < .05$) and *Need* ($r = .21$, $p < .05$) were significantly related to and predictors (*Equality* $\beta = .27$, $p < .01$; *Need* $\beta = .25$, $p < .01$) of family cohesion for female adolescents. Additionally, *Decision Control* ($\beta = .20$, $p < .05$) accounted for unique variance in family cohesion for the females. The standardized beta weights for each regression analysis using distributive justice factor scores to predict family functioning for female adolescents are presented in Table 14.

Distributive Justice Factors and Individual Functioning for Male and Female Adolescents

For male adolescents, none of the distributive justice factors were significantly related to male adolescents' psychological well-being. However, *Need* ($\beta = .30$, $p < .05$) was a predictor of male adolescents' psychological well-being when all of the distributive justice factors were entered simultaneously in separate regression equations to

Table 14

Multiple Regression Using Distributive Justice Factor Scores to Predict Family Functioning For Female Adolescents (N = 100)

	Family Conflict β	Family Cohesion β
Equality	-.35***	.27**
Decision Control	-.15	.20*
Need	-.03	.25**
Equity	.08	-.04
Adjusted R^2	.12**	.13**

Note: Sample size varies across tables due to incomplete questionnaires.

$^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$

predict the psychological well-being of male adolescents. Again, Need ($r = -.43$, $p < .01$) was the only distributive justice factor to be significantly related to and a predictor of ($\beta = -.43$, $p < .01$) male adolescents' psychological distress. Equality ($r = -.33$, $p < .05$) was also the only distributive justice factor to be significantly related to and a predictor ($\beta = -.35$, $p < .05$) of male adolescents' deviant behavior. The standardized beta weights for each regression analysis using distributive justice factor scores to predict individual functioning for male adolescents are presented in Table 15.

Equality was the only distributive justice factor to be significantly related to female adolescents' psychological well-being ($r = .31$, $p < .01$) and psychological distress ($r = -.28$, $p < .01$). Equality was also the only predictor of female adolescents' psychological well- being ($\beta = .31$, $p < .01$) and psychological distress ($\beta = -.27$, $p < .05$) when all four distributive justice factors were entered simultaneously in separate regression equations to predict the psychological well-being and psychological distress of female adolescents. None of the distributive justice factors were significantly related to or predictors of deviant behavior for female adolescents. The standardized

Table 15

Multiple Regression Using Distributive Justice Factor Scores to Predict Individual Functioning For Male Adolescents (N = 55)

	Psychological Well-Being β	Psychological Distress[a] β	Deviant Behavior β
Equality	-.09	-.12	-.35*
Decision Control	-.10	-.12	.04
Need	.30*	-.43**	.12
Equity	.14	-.20	.00
Adjusted R^2	.03	.19**	.06

[a] Psychological Distress $N = 53$

Note: Sample size varies across tables due to incomplete questionnaires.

*$p < .05$, **$p < .01$

beta weights for each regression analysis using distributive justice factor scores to predict individual functioning for female adolescents are presented in Table 16.

Procedural and Distributive Justice Factors and Family Functioning for Male and Female Adolescents

The five procedural and four distributive justice factors were combined as predictors and entered simultaneously in separate regression analyses to predict family conflict and family cohesion for males and females. For male adolescents, none of the five procedural or four distributive justice factors were predictors for either family conflict or family cohesion when all of the factors were entered simultaneously in regression equations to predict family functioning. These findings could be due to the smaller sample size of males ($N = 58$) coupled with the large number of predictors. The standardized beta weights for each regression analysis using both procedural and distributive justice factor scores to predict family functioning for male adolescents are presented in Table 17.

Personal Respect ($\beta = -.20$, $p < .05$) and Status Recognition ($\beta = -.44$, $p < .001$) accounted for unique variance in family conflict for females. Personal Respect ($\beta = .44$, $p < .001$), Status Recognition ($\beta = .32$, $p < .001$), and Neutrality ($\beta = .36$, $p < .001$) accounted for unique

Table 16

Multiple Regression Using Distributive Justice Factor Scores to Predict Individual Functioning For Female Adolescents

	Psychological Well-Being (N=94) β	Psychological Distress (N=92) β	Deviant Behavior (N=93) β
Equality	.31**	-.27*	-.09
Decision Control	.04	-.06	.03
Need	-.04	.07	-.06
Equity	.03	.05	.12
Adjusted $\underline{R}^2$	.06*	.05	-.02

Note: Sample size varies across tables due to incomplete questionnaires.

*$\underline{p}$ < .05, **$\underline{p}$ < .01

Table 17

Multiple Regression Using Both Procedural and Distributive Justice Factor Scores to Predict Family Functioning For Males (N=58)

	Family Conflict β	Family Cohesion β
Process Control	-.20	.28
Neutrality	.02	.13
Personal Respect	-.13	.25
Status Recognition	-.21	.17
Correction	-.14	.19
Equality	-.07	.00
Decision Control	.11	-.13
Need	-.25	.23
Equity	.05	-.01
Adjusted R^2	.13	.25**

Note: Entries are standardized β weights.

*$p < .05$, **$p < .01$

variance in family cohesion for female adolescents. None of the distributive justice factors accounted for unique variance in family functioning for female adolescents when all of the procedural and distributive justice factors were entered simultaneously in regression equations. The standardized beta weights for each regression analysis using both procedural and distributive justice factor scores to predict family functioning for female adolescents are presented in Table 18.

Procedural and Distributive Justice Factors and Individual Functioning for Male and Female Adolescents

The five procedural and four distributive justice factors were combined as predictors and entered simultaneously in separate regression analyses to predict adolescents' psychological well-being, psychological distress, and deviant behavior for males and females. For male adolescents, Neutrality ($\beta = .44$, $p < .05$) was the only factor to predict male adolescents' psychological well-being when all of the procedural and distributive justice factors were entered simultaneously to predict male adolescents' psychological well-being. None of the factors accounted for unique variance in male adolescents' psychological distress or deviant behavior when all of the factors were combined in

Table 18

Multiple Regression Using Both Procedural and Distributive Justice Factor Scores to Predict Family Functioning For Females (N=100)

	Family Conflict β	Family Cohesion β
Process Control	.04	.13
Neutrality	-.12	.36***
Personal Respect	-.20*	.44***
Status Recognition	-.44***	.32***
Correction	.02	.18
Equality	-.15	-.13
Decision Control	-.18	.05
Need	-.00	.11
Equity	.02	-.01
Adjusted $\underline{R}^2$	.30***	.38***

Note: Entries are standardized β weights.

$*\underline{p} < .05$, $**\underline{p} < .01$, $***\underline{p} < .001$

regression equations. The standardized beta weights for each regression analysis using procedural and distributive justice factor scores to predict individual functioning for male adolescents are presented in Table 19.

For female adolescents, Personal Respect ($\beta = .24$, $p < .05$) was the only predictor of female adolescents' psychological well-being and Status Recognition ($\beta = -.32$, $p < .01$) was the only predictor of psychological distress. Again, none of the procedural or distributive justice factors were predictors of female adolescents' deviant behavior. The standardized beta weights for each regression analysis using both procedural and distributive justice factor scores to predict individual functioning for female adolescents are presented in Table 20.

The fifth hypothesis suggests that male adolescents will value procedural and distributive justice constructs that encourage efficiency such as Correction, whereas female adolescents will value those promoting interpersonal relationships such as Personal Respect. The results, however, suggest that both genders valued procedural and distributive justice criteria associated with nurturing interpersonal relationships (e.g., Personal Respect, Status Recognition, Equality, Need) rather than justice criteria related to efficiency (e.g., Correction, Equity).

Table 19

Multiple Regression Using Both Procedural and Distributive Justice Factor Scores to Predict Individual Functioning For Males (N=55)

	Psychological Well-Being β	Psychological Distress[a] β	Deviant Behavior β
Process Control	.01	-.08	.31
Neutrality	.44*	-.04	.25
Personal Respect	.16	.02	.13
Status Recognition	.17	-.09	.08
Correction	.22	-.03	.09
Equality	-.41	-.06	-.61
Decision Control	-.14	-.08	-.12
Need	.13	-.40	-.09
Equity	-.01	-.18	-.13
Adjusted R^2	.07	.11	.02

[a] Psychological Distress $N = 53$

Note: Entries are standardized β weights.

$*p < .05$

Table 20

Multiple Regression Using Both Procedural and Distributive Justice Factor Scores to Predict Individual Functioning For Females

	Psychological Well-Being (N=94) β	Psychological Distress (N=92) β	Deviant Behavior (N=93) β
Process Control	.14	.08	-.01
Neutrality	.20	-.13	-.19
Personal Respect	.24*	-.19	-.12
Status Recognition	.19	-.32**	-.15
Correction	.02	.08	.05
Equality	.10	-.12	.05
Decision Control	-.07	-.11	.05
Need	-.14	.07	-.03
Equity	.07	-.01	.09
Adjusted R^2	.10*	.15**	-.02

Note: Entries are standardized β weights.

$^*p < .05$, $^{**}p < .01$

CHAPTER 5
DISCUSSION

This study focused on refining the Family Justice Inventory--Youth Form (FJI-Y), and investigated the relationship between justice indices and family and individual functioning in adolescents. Exploratory factor analyses were used to further refine and validate the Family Justice Inventory--Youth Form (FJI-Y) thereby creating comprehensive conceptually integrated measures of procedural and distributive justice for adolescents. The items comprising nine procedural justice domains (accuracy, consistency, correction, neutrality, personal respect, process control, standing, trust, and voice) and the items comprising four distributive justice domains (equality, decision control, need, equity) were subjected to separate factor analyses. As a result, five interpretable procedural (Process Control, Neutrality, Personal Respect, Status Recognition, Correction) and four interpretable distributive (Equality, Decision Control, Need, Equity) justice constructs emerged. These results confirmed that procedural and distributive justice concepts are multidimensional (e.g., Diamond, 2001; Fondacaro et al., 2002; Leventhal, 1980; Tyler et al., 1997).

As predicted, there were less procedural justice criteria than originally conceptualized. Corresponding with the findings of the Fondacaro et al. (2002) study, Process Control, Personal Respect, Status Recognition, and Correction were identified as separate factors. Thibaut and Walker's (1975) notion of process control and Leventhal's (1980) idea of voice were grouped together in the Process Control factor. Personal Respect consisted predominantly of Tyler's (1994; 1989) notion of standing and Leventhal's (1980) ethicality or dignity dimension. Status Recognition was primarily comprised of Tyler's (1994; 1989) concept of standing and Levanthal's (1980) idea of consistency. The Correction factor represented Leventhal's (1980) notion of correctability. Neutrality also emerged as a factor, but was not one of the factors in the Fondacaro et al. (2002) study of older adolescents (ages 18 to 22 years). Therefore, Neutrality could be an important justice concept primarily for younger adolescents ages 11 to 18 years. The Neutrality factor combined Leventhal's (1980) concept of accuracy and Tyler's (1994; 1989) notions of neutrality and trust.

For this sample of younger adolescents (ages 11 to 18 years), Neutrality, Personal Respect, and Status Recognition were consistent predictors of each outcome variable (i.e., family conflict, family cohesion, psychological well-being, psychological distress) except deviant behavior, which had no significant procedural justice predictors. This finding is similar to the results of the Fondacaro et al. (2002) study, in which Personal Respect and Status Recognition were significant predictors of family conflict and family cohesion, and Process Control and Correction were not predictors of those outcomes. All of the procedural justice indices (i.e., Process Control, Neutrality, Personal Respect, Status Recognition, Correction) were significant predictors of family cohesion. Therefore, abiding by procedural justice principles when resolving family disputes is associated with more cohesive families. Due to the correlational nature of this study it is not possible to determine the direction of influence of the results. For example, cohesive family environments could lead to families resolving disputes in a manner that adheres to procedural justice concepts. Longitudinal and intervention studies could help in understanding directions of influence.

Adolescent participants reported more family cohesion when they perceived their parents lacked bias, treated them with respect, treated them as a valued member of the group, provided them with some control over the decision-making process, and/or were able to have the decision reconsidered. Adolescents from families with lower levels of conflict are more likely to report that their parents handled conflict resolution in a neutral manner, treated them with respect, and/or as an important member of the group. Similarly, adhering to principles of procedural justice when resolving family disputes is associated with an adolescent's overall psychological well-being and experience of less psychological distress. Adolescents whose parents resolve disputes in an impartial manner, with personal respect and/or regard their child as a valued member of the family were more likely to report feelings of happiness and positive self-worth. Conversely, adolescents reported more feelings of distress and greater incidences of family conflict when their parents handled disputes in a less neutral manner, without treating them with respect, and/or by not regarding them as an important member of the family. These results support the idea that adolescents who perceive their parents as resolving disputes unfairly may feel resentment toward their parents, which over time leads to repeated family conflicts (Fondacaro et al., 2002; Fondacaro & Heller 1990; Tedeschi & Felson, 1990). Again, these results do not imply causality as the results are based on correlational information.

Interestingly, Correction and Process Control did not predict any of the outcome variables except for family cohesion, for which all of the procedural justice factors were significant predictors. These findings further support the research by Hicks and Lawrence (1993) and Fondacaro et al. (2002). Hicks and Lawrence (1993) asserted that unlike adults, adolescents do not consider correctablity to be an important procedural justice dimension. In addition, Fondacaro et al. (2002) found Correction to be an important justice criterion only when the procedural justice variables were examined in isolation and not when procedural and distributive justice factors were combined. Moreover, participants in the Fondacaro et al. (2002) study were older adolescents (ages 18 to 22 years). Therefore, adults and older adolescents may value correction or the right to appeal more than younger adolescents. Apparently, Process Control is not an important procedural justice criterion for younger or older adolescents (Fondacaro et al., 2002) in the family decision-making context. This is a surprising finding given that in a variety of contexts Process Control is typically considered a fundamental procedural justice criterion. Perhaps adolescents would prefer to have their parents maintain control over the decision-making process because they still look to their parents for guidance and support and as the ultimate authority figure. The issue of Process Control may be more important to individuals when they consider themselves equals in the decision-making process. In the family context, it is more likely that children perceive their parents as superior to them. Future research could investigate the underlying reasons that Process Control does not play a central role in family decision-making with adolescents as opposed to other contexts.

For distributive justice, Equality predicted all of the outcome measures (i.e., family conflict, family cohesion, adolescents' psychological well-being, adolescents' psychological distress, and deviant behavior). Therefore, younger adolescents are more likely to report lower levels of family conflict, higher levels of family cohesion, less psychological distress, less deviant behavior, and a better overall psychological well-being when the outcome of a family dispute is based on dividing resources equally, regardless of input. These findings complement the distributive justice research that suggests people will consider equality an important distributive justice criterion when seeking to foster pleasant social relationships (Tyler & Smith, 1995; Deutsch, 1975). Parents who base decisions on dividing resources equally are associated with families characterized as having low conflict and high support. Furthermore, family disputes resolved on the basis of Equality is related to a better overall psychological well-being with less distress for adolescents.

Consistent with the Fondacaro et al. (2002) study, Decision Control and Need were also significant predictors of family cohesion. These results suggest that younger adolescents from cohesive families are more likely to report that their parents gave them some control over the final decision. Additionally, adolescents indicated more cohesive families when the final decision was based on helping those in the greatest need and/or dividing resources equally.

As predicted in the fourth hypothesis, only the procedural justice factors accounted for unique variance in family functioning when both of the procedural and distributive justice factors were included in the same regression equation to predict family cohesion and family conflict. Additionally, the procedural justice criteria accounted for more of the variance in adolescents' psychological well-being and psychological distress. These findings support procedural justice research suggesting that people are concerned more about how they are treated during the decision-making process than the ultimate outcome. (e.g., Fondacaro et al., 2002; Lind & Tyler, 1992; Tyler 1989; Thibaut & Walker, 1975). Moreover, parents who adhere to principles of procedural justice during dispute resolution are associated with having adolescent children who have a positive psychological well-being and with families characterized as having low conflicts and high support.

The hierarchical regression analyses also demonstrated that adolescents consider procedural justice principles to be more important than distributive justice principles when resolving family disputes. When only the distributive justice factors were examined, parental decisions based on equality were associated with low family conflict, low psychological distress, low deviant behavior, and psychological well-being of adolescents. Distributive justice principles of equality, need, and decision control were also associated with family cohesion. However, when the framework is expanded to include both procedural and distributive justice criteria, then only the procedural justice criteria prevail. This further supports the need for a comprehensive approach to understanding the influences of procedural and distributive justice, because the implications are different when the two constructs are examined together rather than in isolation. A comprehensive approach to procedural and distributive justice sheds light on how procedural and distributive justice operate in conjunction with each other.

When comparing the males and females, it appears that similar to the findings of Hicks and Lawrence (1993) the female participants value more procedural justice criteria than the males. For the females at minimum two procedural justice indices (i.e., Personal Respect and Status Recognition) were indicated as significant predictors of each outcome variable (i.e., family conflict, family cohesion, psychological well-being, and psychological distress) except deviant behavior. Furthermore, all five procedural justice criteria were predictors of family cohesion for the females. For male adolescents, none of the procedural justice dimensions predicted family conflict, psychological distress, or deviant behavior. However, the more positive outcome variables of family cohesion and psychological well-being did have procedural justice predictors for male adolescents. This suggests that following some procedural justice concepts in family decision-making may be associated with close familial relationships as well as a general overall happiness for male adolescents, and yet doing so is not related to family conflict, psychological distress, or deviant behavior for males.

The results of this study suggest that male and female adolescents value different distributive justice criteria within the family context. Decisions based on Equality or dividing resources equally was paramount to the females, whereas Need was the most important distributive justice criterion for the males. Although we might expect to find both Equality and Need to be important distributive justice criteria within the family context, it is intriguing to notice the gender difference in this study. Seemingly, adolescent females are interested in promoting pleasant social relationships by espousing Equality, and adolescent men are most concerned with personal welfare in general by choosing Need. This is an interesting finding given that distributive justice research with adults has found gender differences that suggest woman care about relationships and men care about objective impersonal positions (Kidder, Fagan, & Cohn, 1981). Apparently within the family context, adolescent males care about the person with the greatest need, which could be attributed to wanting to promote familial closeness. This finding could be context specific and should be replicated before making further conclusions.

When the procedural and distributive justice dimensions were combined to predict family and individual functioning for each group of males and females, once again, only the procedural justice variables were predictors. For the males, only psychological well-being had a significant procedural justice predictor (Neutrality). This could be due to the small sample size of boys coupled with the large amount of procedural and distributive justice predictors. All of the results from dividing the males and females should be reviewed with caution given that the sample size for the males became quite small once they were separated from the female participants. Moreover, the results particularly for male adolescents could change with more participants and less predictors.

The most discouraging finding was that none of the procedural justice dimensions predicted deviant behavior. Furthermore, Equality was the only distributive justice criterion to predict deviant behavior for all of the participants and for just the males. None of the distributive or procedural justice criteria predicted deviant behavior for the female participants.

The results of this study have added to the growing body of research on procedural and distributive justice within the family context. However, they will need to be replicated and further validated. Additionally, cross-validation and confirmatory factor analysis may lead to revisions of the factors. Therefore, FJI-Y should be refined further to create valid measures of procedural and distributive justice that are comprehensive and conceptually integrated to guide basic and applied research on parent-adolescent conflict. Under the realm of family decision-making there is a considerable amount of procedural and distributive justice research yet to be investigated. For example, socioeconomic status, family structure, and parenting styles could all influence how justice is perceived and valued, which could in turn, contribute to family and individual functioning. Due to the apparent context specificity of justice appraisals, it is probable that examining various aspects of family dynamics would produce some results that are unique to each situation. This research could be valuable to therapists and counselors who seek to understand and teach conflict resolution strategies for diverse families to promote family cohesion and prevent problems in adolescence or adulthood.

Limitations

Due to the correlational nature of this study, it is difficult to determine the direction of influence of the results. Although resolving family conflicts in a fair manner may result in less overall family conflict, the reverse also may be true. That is, previous family conflicts may influence parents to resolve disputes in a manner perceived by their children to be unfair. Longitudinal studies could help explain the interplay of justice perceptions and family and individual functioning. Additionally, intervention studies that teach parents how to resolve conflicts by incorporating procedural justice principles would help determine whether adhering to procedural justice concepts in dispute resolution serves to improve family and adolescent functioning.

The lack of procedural and distributive justice predictors for deviant behavior could be due to the small amount of behavior problems reported by the participants. Perhaps with a more diverse sample of adolescents or adolescents with behavior problems (e.g., adjudicated youths), particular procedural and distributive justice principles may be unveiled as predictors of deviant behavior for adolescents. Furthermore, this was a broad sample of adolescents who ranged in age from 11 to 18 years. Therefore, the deviant behavior scale used in this study might not have tapped into the more benign acts of deviant behavior engaged in by younger adolescents ages 11 to 14 years.

The self-report design of this study is susceptible to social desirability effects. That is, adolescents may have responded with answers that are more politically correct than indicative of their true behavior. Social desirability may have influenced adolescents to report less deviant behavior. Furthermore, adolescents may have indicated that they care more about the process of resolving disputes than the final outcome to appear more sensible and not because they truly believe procedural justice is more important. Future investigations should examine the influence of social desirability effects.

Finally, since the sample of this study was in part a sample of convenience, it is difficult to determine whether the results are generalizable to the population. However, the sample was comparable to the demographics in Alachua County and could be representative of the population. Therefore, these results can be used to make reasonable assumptions about how adolescent’s perceptions of justice appraisals impact family and adolescent functioning.

APPENDIX A
DEFINITIONS FOR PROCEDURAL AND DISTRIBUTIVE JUSTICE DOMAINS

Procedural Justice

1. Accuracy - refers to whether decision-making is based on as much good information and informed opinion as possible.
2. Consistency - refers to whether decision-making procedures are consistent across persons and over time.
3. Correction - refers to whether opportunities exist to modify and reverse decisions made at various points in the decision-making process.
4. Neutrality (Impartiality) - refers to whether a decision-making authority creates a "level playing field" by demonstrating even-handed treatment, honesty, and lack of bias.
5. Personal Respect (Ethicality) - refers to whether the person was treated with personal respect as a unique individual.
6. Process Control - refers to a person's control over the presentation of information or evidence.

7. Standing/Status Recognition - refers to the extent to which an authority figure treats a person as a valued member of the group.
8. Trust - refers to a person's beliefs about the good intentions or motives of someone with decision-making authority.
9. Voice - refers to whether the individual had an opportunity to present his/her views.

Distributive Justice

1. Decision Control - refers to an individual's control over the actual decision made.
2. Equality - refers to whether the decision-making outcome is based on dividing resources equally, regardless of input.
3. Equity - refers to whether the decision-making outcome is based on the individual's prior contributions.
4. Need - refers to whether the decision-making outcome is based on helping those with the greatest need.

APPENDIX B
PROCEDURAL JUSTICE SUBSCALES AND ITEMS*

Accuracy (alpha = .87)

1. Your parent (s) handled this situation in a very careful manner.

15. The procedures or rules that your parent(s) applied to this situation were very effective in getting at the facts.

18. Your parent(s) got all the information needed to make a good decision.

40. Your parent(s) seemed well-organized in how they handled things.

*The number for each item corresponds to the item number on the FJI-Y

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49. Your parent(s) handled this situation in a very complete manner.

63. Your parent(s) tried to bring the issues into the open so that they could be resolved.

Consistency (alpha = .79)

3. Your parent(s) favored others over you.

2. Your parent(s) treated you worse than others because of your personal characteristics (gender, age education, race).

16. When you compare the way you were treated to the way your parent(s) generally treat people in similar situations, you received worse treatment.

32. Your parent(s) gave better treatment to others than they gave you.

35. Your parent(s) looked down on you in comparison to others.

78. Your parent(s) used consistent standards to evaluate your actions, performance, or behavior.

Correction (alpha = .72)

10. You were able to request a change of the outcome of the decision.

23. You knew of someone in a position of authority you could have complained to if you felt your parent(s) were unfair.

55. You learned that you could count on your parent(s) to correct their mistakes.

68. Any wrong decisions in this situation could be easily corrected.

79. You were given a chance to improve your performance or behavior before a final decision was made.

81. You had a chance to have the decision reconsidered.

Neutrality/ Impartiality (alpha = .88)

3. Your parent(s) showed a real interest in trying to be fair.

11. The methods used by your parent(s) favored one person over another.

17. Your parent(s) listened to all sides.

39. The procedures followed, rules applied, or approach taken by your parent(s) was effective in assuring that the situation was handled in a neutral manner.

54. The methods used by your parent(s) were equally fair to everyone involved.

56. Your parent(s) tried hard to bring all sides of the issue out into the open.

Personal Respect/ Ethicality (alpha = .91)

22. You were treated politely by your parent(s).
29. Your parent(s) showed a lot of kindness and understanding.
37. Your parent(s) treated you with respect.
44. Your parent(s) were cold and unpleasant.
46. Your parent(s) were courteous to you.
84. Your parent(s) treated you in a dignified manner.

Process Control (alpha = .91)

19. You had personal control over how this situation was handled.
25. You were given more than enough opportunity to describe your point of view.
38. You had an opportunity to present your side of the story.
45. You had enough of a chance to describe your problem before any decisions were made about how to handle it.
53. Everyone had an opportunity to tell his or her side of the story.
82. You had some say in how the situation would be handled before a final decision was made.

Standing/ Status Recognition (alpha = .86)

4. You were treated by your parent(s) as if you didn't matter.
33. Your parent(s) gave you less respect than they would have given to almost anyone else.
50. Your parent(s) treated you as a valued member of the family.
52. The way your parent(s) treated you shows that they really look up to you.
64. Your parent(s) treated you as if you were somebody really important.
83. The way your parent(s) treated you shows that they really look down on you.

Trust (alpha = .85)

11. Your parent(s) were very honest.
34. Your parent(s) were truthful to you.
36. Your parent(s) handled the situation in an ethical or proper manner.
47. Your parent(s) did something that you thought was dishonest.
57. You trust the way your parent(s) handled the situation.
70. Your parent(s) seemed very interested in helping you.

Voice (alpha = .87)

1. Your parent(s) asked for your input before a decision was made.

20. Your parent(s) gave you an opportunity to express your side.

26. Your parent(s) carefully considered your views.

41. When your parent(s) made their decision, they gave little consideration to what you said.

67. You had a chance to discuss how you were being evaluated.

77. You felt as if your parent(s) listened to you.

APPENDIX C
DISTRIBUTIVE JUSTICE SUBSCALES AND ITEMS*

Decision Control (alpha = .87)

12. You had a lot of influence over the decision made.
27. You had personal control over the outcome in this situation.
30. You had some control over the decision that was made.
58. You had some control over the decision made by your parent(s).
69. You had a great deal of personal control over the outcome of this situation.
85. You had little influence over the decisions made by your parents.

*The number for each item corresponds to the item number on the FJI-Y

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Equality (alpha = .87)

14. In this situation you felt that you received an equal share.

11. The outcome here was based on dividing things equally rather than on effort or input.

13. The outcome here was based on dividing things equally rather than on who had the greatest need.

28. The outcome of this situation met your desire for equality.

32. The most important outcome of this situation was that you received your equal share.

38. The outcome was based on dividing things equally.

Equity (alpha = .71)

1. The outcome of the situation was directly related to your actions, input or performance.

3. The outcome of this situation was completely out of your hands.

5. Your past behaviors greatly affected the outcome you and your parent(s) reached in this situation.

6. Your past behavior was fairly taken into consideration in how this situation was resolved.

8. The amount of input you had was equal to the amount of control you had over the outcome of the situation.
41. The outcome of this situation is the direct result of the way you acted.

Need (alpha = .81)

13. The outcome here was based on helping the person who need the most help.
14. The decision seemed to help the person who needed it most.
15. The outcome was based on consideration of what you needed.
19. Your needs were not met.
20. The outcome here was based on who had the greatest needs rather than an effort or input.
22. You got as much as you needed.

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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

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